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10/714,110	11/14/2003	Clemens Jung	IT20030039	1927

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EXAMINER	
KO, STEPHEN K	

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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte CLEMENS JUNG, PETER SCHWARZWELLER,
KONRAD PETRY, and REINHOLD BALTES

Appeal 2009-2404
Application 10/714,110
Technology Center 1700

Decided:[1] April 23, 2009

Before CHUNG K. PAK, PETER F. KRATZ, and LINDA M. GAUDETTE, *Administrative Patent Judges*.

GAUDETTE, *Administrative Patent Judge*.

DECISION ON APPEAL

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[1] The two-month time period for filing an appeal or commencing a civil action, as recited in 37 C.F.R. § 1.304, begins to run from the Decided Date shown on this page of the decision. The time period does not run from the Mail Date (paper delivery) or Notification Date (electronic delivery).

Appellants appeal under 35 U.S.C. § 134(a) from the Examiner's decision rejecting claims 2, 8-10, and 12-20 (Office Action mailed Jul. 16, 2007), the only claims pending in the application. We have jurisdiction under 35 U.S.C. § 6(b).[2]

We REVERSE.

STATEMENT OF THE CASE

The invention relates to a method of cleaning dishes in a dishwasher which takes into account the solubility of soil on the dishes in setting an operating parameter of the wash cycle. Claim 12, the sole independent claim, is illustrative of the subject matter on appeal, and is reproduced from the Claims Appendix to the Appeal Brief ("App. Br."), filed Dec. 7, 2007:

> 12. A method of cleaning dishes in a dishwasher in accordance with a programmed wash cycle implemented by a central control unit and comprising a rinse step where a rinse liquid is recirculated in the dishwasher and a cleaning step where a wash liquid is recirculated in the dishwasher, the method comprising:
>
> determining a solubility of soil on the dishes to be cleaned; and
>
> setting at least one operating parameter of the cleaning step based on the determined solubility.

This is the second appeal before the Board in the above-identified patent application. In our decision ("Dec.") in the prior appeal (Appeal 2006-3025, decided Mar. 29, 2007), we reversed the Examiner's decision finally rejecting claims 2, 8-10, and 12-20 (i.e., the identical claims in the present appeal) under 35 U.S.C. § 103(a) as unpatentable over Bashark (US

[2] Although the action appealed from was a non-final rejection, we have jurisdiction since these claims have been twice presented and rejected. *See Ex parte Lemoine,* 46 USPQ2d 1420, 1423 (BPAI 1994).

3,888,269, issued Jun. 10, 1975) in combination with Smith (US 5,586,567, issued Dec. 24, 1996). In concluding that the Examiner's rejection could not be sustained, we stated (Dec. 5):

> Appellants have persuasively argued that one of ordinary skill in the art at the time of the invention would not have viewed the applied prior art as disclosing, either explicitly or inherently, a method in which "solubility of soil on the dishes to be cleaned" is measured. Appellants' arguments, though clearly pointing out the differences between turbidity and solubility, have not been addressed by the Examiner. (*See* Answer 6).

In addition, we remanded the application pursuant to 37 C.F.R. § 41.50(a)(1), instructing the Examiner to, inter alia, "evaluate the propriety of a possible rejection under 35 U.S.C. § 103 in view of Morey et al, US 3,114,253 (*see* Bashark, col. 1, ll. 54-59) either alone or in combination with the prior art dishwashers or inventive dishwasher controls referred to in Bashark." (Dec. 6.)

After remand of the application to the Examiner, the Examiner rejected claims 2, 8-10, and 12-20 under 35 U.S.C. § 103(a) as unpatentable over Bashark in combination with Smith and Morey (US 3,114,253, issued Dec. 17, 1963). Appellants request review of this sole, remaining ground of rejection (App. Br. 4).[3]

[3] Appellants request for review of the provisional rejection of claims 2, 8-10, and 12-20 under the judicially created doctrine of obviousness-type double patenting (App. Br. 4) has been rendered moot by the Examiner's withdrawal of the rejection (Examiner's Answer ("Ans."), mailed March 14, 2008, 3).

ISSUE

Have Appellants shown reversible error in the Examiner's determination that it would have been obvious to have included a measurement of the solubility of soil on dishes in Bashark's control system?

We answer this question in the affirmative.

FINDINGS OF FACT

1. Bashark discloses a control system for a dishwasher in which the "[c]ontrol means . . . are responsive to the sensed turbidity and collected liquid depth" (col. 2, ll. 57-59) so that "the dishwasher automatically effects the necessary amount of washing" (col. 2, ll. 45-46).

2. In both the present appeal and the prior appeal, the Examiner determined that "[i]t would have been obvious for one skilled in the art to use the process taught by Bashark to obtain the claimed process, because the steps of measuring the turbidity as taught by Bashark will include determining the solubility of the soil as claimed" (Ans. 4; Examiner's Answer mailed May 11, 2006 ("2006 Ans."), 5).

3. To establish that Bashark's turbidity measurement would inherently include a determination of solubility of soil on the dishes, the Examiner again relies on Smith's definition of "turbidity" as "a measure of the suspended and/or soluble soils in the fluid that causes light to be scattered or absorbed" (Smith, col. 3, ll. 51-53). (Ans. 4, 5; *see also*, 2006 Ans. 5, 6 and Dec. 5.) In the present appeal, the Examiner also relies on Morey's teaching that "rate of removal of soil from fabrics in a washing machine has a direct relationship to the rate of change of turbidity of the washing solution" and Morey's use of "this knowledge to

cause the washing operation to be terminated when the rate of change of turbidity approaches zero." (Ans. 5 (citing Morey, col. 11, ll. 15-21).)

4. According to Appellants' Specification, at the time of the invention, the ordinary artisan was familiar with control systems for use in dishwashers based on measuring "the degree of soiling, i.e. the turbidity of the rinsing liquid." (Spec. ¶ [0004].) According to the Specification, "no adequate cleaning can be achieved in this manner with optimized power and water consumption for the various types and quantities of soiling." (Spec. ¶ [0005].) The invention is said to provide an improved control system in which "the rinse program runs automatically with minimum power and water consumption, and consideration is given to the variable soiling of the dishes according to the degree of soiling and solubility" (Spec. ¶ [0006]).

5. None of the applied references explicitly mention measuring or calculating solubility of soil.

PRINCIPLES OF LAW

"[R]ejections on obviousness grounds cannot be sustained by mere conclusory statements; instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness." *KSR Int'l v. Teleflex, Inc.*, 550 U.S. 398, 417 (2007) (quoting *In re Kahn,* 441 F.3d 977, 988 (Fed. Cir. 2006)).

ANALYSIS

We are in agreement with Appellants that the Examiner's obviousness determination is unsupported by the evidence of record. As pointed out by Appellants, the Examiner relies on substantially the same reasoning used in

the prior appeal to establish that Bashark's turbidity measurement would inherently include a determination of solubility of soil on the dishes. The Examiner's arguments are unconvincing for the same reasons explained in our prior decision (*see generally*, Dec.).

In response to Appellants' arguments, the Examiner does additionally find that "[o]ne skilled in the art would measure the solubility of the soil by calculating the amount of soil and the turbidity of the liquid." (Ans. 5.) The Examiner fails to identify any evidentiary support for this finding. (*See* Reply Brief, filed May 14, 2008, 4.) Moreover, even if true, the Examiner has not explained why the ordinary artisan would have been motivated to perform an additional step of measuring solubility after determining the amount of soil and turbidity.

In sum, Appellants have overcome the Examiner's rejection by showing insufficient evidence of prima facie obviousness. *See In re Kahn*, 441 F.3d at 985-86 (quoting *In re Rouffet*, 149 F.3d 1350, 1355 (Fed. Cir. 1998)).

CONCLUSION

Appellants have identified reversible error in the Examiner's obviousness determination. The decision of the Examiner rejecting claims 2, 8-10, and 12-20 is reversed.

REVERSED

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